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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,731	12/31/2001	Mark T. Anderson	57421US002	7407

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EXAMINER

HELLNER, MARK

ART UNIT	PAPER NUMBER
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3663

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,731

Applicant(s)

ANDERSON ET AL.

Examiner

Mark Hellner

Art Unit

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NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application:
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-24 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7 and 8, 7
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 24 is rejected under 35 U.S.C. 102(e) as being anticipated by Tankala et al.

Tankala et al disclose an optical amplifying fiber comprising: an optical fiber having a core that includes silica, Al, a non-fluorescent rare earth ion, Ge, Er, and Tm (column 6, lines 55-60) and mean (column 5, line 61) for pumping the optical fiber.

The structure recited above reads on claim 24.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tankala et al.

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Tankala et al disclose an erbium doped fiber amplifier comprising: high purity silica-based cladding layers (136); and a silica core glass (132) including Al, a non-fluorescent rare-earth ion, Ge, Er, and Tm (column 6, lines 55-60).

The difference between claim 1 and Tankala et al is the steps of providing a substrate tube, depositing the core and cladding materials in the tube, collapsing the tube to yield a preform, and drawing the perform to yield an optical fiber.

Tanaka et al disclose a preform (106A) with the core and cladding material deposited therein. Drawing the preform to yield an optical fiber is shown by figure 3A.

As a result the differences in claim 1 not directly taught by Tankala et al are providing a substrate tube and collapsing the tube to yield a perform.

These differences would have been obvious to a person of ordinary skill in the art because they fall into the category conventional methods known in the art of perform manufacture as suggested by column 6, lines 57-59 of Tankala et al.

Claim 2 is taught by the use of Lanthanides (column 6, line 55)

Claim 4 is taught by column 6, line 56.

Claim 18 is taught by column 6, line 29.

Claims 19 and 20 would have been obvious because multiple sol gel passes or multiple soot deposition, solution doping, and consolidation passes were known at the time of the present application to have been conventional methods for providing material for an optical perform as suggested by column 6, line 30 of Tankala et al.

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The use of Y, Sc and Lu as the non-fluorescent rare-earth ion (claims 21-23) would have been obvious because these elements have the same outer shell configuration as Lanthanum.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15 and 18-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9, 13-18, 24-26 and 35-37 of Patent No. 6,724,972 in view of Tankala et al. ***

Claims 1-9, 13-18, 24-26 and 35-37 of USPN 6,724,972 respectively correspond to claims 1-9, 10-15, 21-23 and 18-20 of the present application.

The difference between the claim sets is set forth by the limitations in claim 1 as follows:

providing a substrate tube, depositing the core and cladding materials in the tube, collapsing the tube to yield a preform, and drawing the perform to yield an optical fiber.

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The differences recited above would have been obvious to a person of ordinary skill in the art in view of Tankala et al for the reasons applied to claim 1 in the rejection under 35 USC 103 set forth above.

Claim 24 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 29 of U.S. Patent No. 6,724,972. Although the conflicting claims are not identical, they are not patentably distinct from each other because

Claim 1 (the parent of claim 29) of USPN 6,724,972 teaches the subject matter of claim 24 of the present application (see lines 6 and 7) with the exception of coupling the optical fiber to a pump laser.

This difference is suggested to a person of ordinary skill in the art by claim 29 of USPN 6,724,972 because pumping means were known at the time of the present application to be an essential requirement of a waveguide being used as an amplifier.

Claim 16 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,757,474 in view of Tankala et al.

Claim 1 of USPN teaches claim 1 (note claim 1 is the parent of claim 16) of the present application with the exception of:

providing a substrate tube, depositing the core and cladding materials in the tube, collapsing the tube to yield a preform, and drawing the preform to yield an optical fiber.

This difference is taught by Tankala et al as applied in the rejection of claim 1 under 35 USC 103 set forth above.

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The boron free cladding recited by claim 16 is taught by lines 12 and 13 of claim 1 of USPN 6,724,972.

Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Mark Hellner at telephone number 703 306 4155.

Mark Hellner

Primary Examiner

AU 3663

A handwritten signature in black ink, appearing to read "Mark Hellner", with a stylized flourish at the end.